

## **REMARKS**

### **Amendments**

Claims 1 and 43 are amended to recite that in formula IIc at least one subscript r is 1, 2, 3 or 4, and at least one R is other than H. Claim 2 is amended to recite that when X is biphenyl then it is substituted. See, e.g., page 17, lines 30-31. Claim 4 is amended to depend from claim 2 and to insert definitions for  $R^{5-}$ ,  $R^{11}$ ,  $R^0$  and  $R^{00}$ . Claim 10 is cancelled in light of the definition of group X in claim 1. Claim 11 is amended to correct a typographical error. Claim 40 is cancelled. Claim 41 is amended to include the definitions of  $R^1$ – $R^4$  from claim 2, and to delete superfluous language. Claim 41 is also amended to define subscript n as >1. Claim 44 is amended to incorporate definitions of  $R^1$ –R and Ar from claim 2.

New claims 45-46 are directed to further aspects of applicants' invention and are supported throughout the disclosure. See, e.g., page 10, lines 27-35, and page 14, line 35 – page 16, line 20.

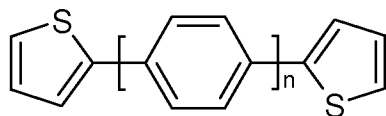
### **Withdrawn Claims**

Applicants, again, respectfully request reconsideration of the holding that claims 18, 20-23, 27, 28, and 36 are withdrawn from consideration. Claims 18, 20-23, 27, and 36 depend directly from claim 13. Claim 28 depends directly from claim 27, which in turn depends directly from claim 13. Applicants respectfully submit that claims 18, 20-23, 27, 28, and 36 should be under consideration for the same reasons that claim 13 is under consideration.

### **Rejections under 35 USC §102(b) and 35 USC §103(a) in view of Lee et al.**

Claims 1-7, 10, 11, 24, 26, 33, 34 and 40-41 are rejected as allegedly being anticipated in view of the article by Lee et al. (J. Phys. Chem. A 2000, 104, 1827-1833). In addition, claim 25 is rejected as allegedly being obvious in view of the article by Lee et al. These rejections are respectively traversed.

Lee et al. describe an investigation into spectroscopic characteristics of compounds exhibiting thiophene and phenylene ring groups. The compounds investigated are shown at the top of page 1828. In particular, the rejection refers to the compound of formula



TnP (n = 1-2)

This formula encompasses two monomeric compounds, one of which is designated T2P in Table 1 at page 1829. These two compounds do not suggest the oligomeric and polymeric compounds recited in applicants' amended claims 1, 2, and 43. See, e.g., the proviso clauses of amended claims 1, 2, and 43.

In view of the above remarks, it is respectfully submitted that Lee et al. fails to anticipate or render obvious applicants' claimed invention. Withdrawal of the rejections under 35 USC 102(b) and 103(a) is respectfully requested.

#### **Rejections under 35 USC §102(b) and 35 USC §103(a) in view of Ng et al.**

Claim 13 is rejected as allegedly being anticipated by Ng et al. (CAPLUS 2000:634223), Macromolecules 2000, 33, 7349-7358. In addition, claim 18 is rejected as allegedly being obvious in view of Ng et al. This rejection is respectively traversed.

In the rejection of claim 13, it is asserted that Ng et al. disclose compounds having a polythiophene structure in which a Y group is alkyl- or alkoxy substituted phenylene. It is further asserted that such a compound reads on formula Ic of claim 13 "with subformula IIIa or IIIb." Claim 13 does not recite the latter two subformulas. However, it is assumed that this the Examiner is referring to compounds wherein group X is of the subformulas IIIa and IIIc as those subformulas are defined in claim 12.

The proviso clauses (b) and (c) of claim 13 recite that (emphasis added):

b) **X and Ar(R<sup>1</sup>R<sup>2</sup>) are different from** dithienothiophene, **1,4-phenylene, 2,5-dialkyl- or 2,5-dialkoxy-1,4-phenylene**, furan-2,5-diyl, 1-alkyl-1H-pyrrol-2,5-diyl, 9H-fluorene-2,7-diyl, 9,9-dialkyl-9H-fluorene-2,7-diyl, N-alkyl-9H-carbazole-2,7-diyl and anthracene-9,10-diyl, and

c) **Ar(R<sup>1</sup>R<sup>2</sup>) is different from 2,5-dialkyl- or 2,5-dialkoxy-1,4-phenylene**, naphthalene-2,6-diyl, naphthalene-4,8-diyl that is substituted in 1-, 4-, 5- and/or 8-position with alkoxy,

dimethylsiloxane or oxymethyloxirane groups, 9,9-dialkyl-9H-fluorene-2,7-diyl and N-alkyl-9H-carbazole-2,7-diyl.

Thus, contrary to the assertion in the rejection of claim 13, Ng et al. do not disclose compounds which anticipate applicants' claimed compounds. Nor does Ng et al. suggest applicants' claimed compounds or the use thereof as a semiconductor or charge transport material in an effect transistor (FET) or thin film transistor (TFT), as recited in applicants' claim 18.

In view of the above remarks, it is respectfully submitted that Ng et al. fails to anticipate or render obvious applicants' claimed invention. Withdrawal of the rejections under 35 USC 102(b) and 103(a) is respectfully requested.

**Rejection of Claims 40, 41, and 44 under 35 USC 112, second paragraph**

This rejection is rendered moot by the cancellation of claim 40 and the amendments to claims 41 and 44. Withdrawal of the rejection is respectfully requested.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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